

REMARKS

Reconsideration of this application and the rejection of claims 1-4, 6, 7 and 9-31 are respectfully requested. Applicant has attempted to address every objection and ground for rejection in the Office Action dated July 30, 2007 (Paper No. 20070711), which has been made Final, and believes the application is now in condition for allowance, or alternatively, in better form for an Appeal. The claims have been amended to more clearly describe the present invention.

Claim 20 stands rejected under 35 U.S.C. §112, second paragraph because the term “preferably” is considered indefinite. Accordingly, Applicant has deleted “preferably” from claim 20, and respectfully traverses the rejection under Section 112.

Claims 1-4, 6, 7, 9-18, 20, 21 and 25-31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Wiles et al. (U.S. Pat. No. 6,509,964) in view of Eidelman et al. (U.S. Pat. No. 6,822,734). Wiles discloses a multi-beam apparatus for measuring surface quality including a first light source 12a directing focused beams of light 14 onto a surface of a workpiece 10, and a second light source 26 configured for providing a beam of collimated, unfocused light. Eidelman discloses an inspection apparatus including a diffuser 68.

Applicant submits that neither Wiles nor Eidelman, either alone or in combination, discloses or suggests all of the features recited in amended claim 1. Specifically, amended claim 1 now recites, among other things, “...a plurality of second radiation means having at least one second radiation source, each of which

projects substantially non-collimated radiation onto the measurement surface; and at least one radiation detector means...wherein said radiation detector means comprises a device for detecting incident radiation dependent on a wavelength of said radiation.”

Wiles fails to disclose or suggest a plurality of second radiation means, as now recited in amended claim 1. Rather, Wiles discloses a first radiation means 26 and a second radiation means 12a (FIG. 1), or first and second radiation means 12a, 12b (FIG. 2). Further, the radiation detector means 20 in Wiles does not include a device for detecting incident radiation dependent on a wavelength of the radiation. Specifically, the detector means 20 in Wiles detects radiation reflected from the face of the surface 10, but does not detect incident radiation projecting onto the face of the surface based on the wavelength of the radiation. Indeed, Wiles fails to recognize the need to detect such incident radiation based on its wavelength.

In Eidelman, the photo detector or sensor 48 receives an image of the substrate 24 from a mirror 50, and does not disclose or suggest a device for detecting incident radiation dependent on a wavelength of the radiation. Eidelman also fails to disclose or suggest at least one first radiation means and a plurality of second radiation means, and fails to recognize the need for providing a plurality of second radiation means, i.e., for providing a uniform, non-collimated radiation.

Claim 7 has also been amended and now recites, among other things, "...a diffuser surface of each said radiation diffuser means is mounted at a specified diffuser surface angle relative to the measurement surface, said angle defined by a geometrical connecting axis extending from a longitudinal axis of each said second radiation means to a geometrical center of the measurement surface, said specified diffuser surface angle being between 0 degrees and 90 degrees, preferred between 30 degrees and 90 degrees, particularly preferred between 75 degrees and 90 degrees."

Wiles fails to disclose or suggest a diffuser. Eidelman fails to disclose or suggest the diffuser angle as defined in amended claim 9. Specifically, in Eidelman, the diffusers 68 are provided within respective illumination units 60 that are mounted in a fixed orientation to respective walls, and the angular orientation of the stage 46 is modified. Accordingly, the diffuser angle in Eidelman is defined based on the angular orientation of the stage, and not by a connecting axis extending from a longitudinal axis of the radiation means to a geometrical center of the measurement surface. Accordingly, Applicant respectfully traverses the rejection of claims 1-4, 6, 7, 9-18, 20, 21 and 25-31 under Section 103.

Claims 19, 23, and 24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Wiles in view of Eidelman and further in view of Schwarz. Schwarz discloses a device and method for determining the quality of structured surfaces, including a measurement device and a coating thickness

sensor 5. None of Wiles, Eidelman or Schwarz, either alone or in combination, discloses or suggests the features now recited in amended claim 1, from which claims 19, 23 and 24 depend. The arguments made above traversing Wiles and Eidelman are reasserted here.

Schwarz fails to disclose or suggest a plurality of second radiation means or a radiation detector means including a device for detecting incident radiation dependent on a wavelength of the radiation, as now recited in amended claim 1. Rather, Schwarz discloses a first optical means 110 for emitting an irradiated radiation onto a measurement surface, and a second optical means 120 for receiving the light reflected from the measurement surface. Schwarz also fails to recognize the need for a plurality of second radiation means (i.e., for providing a uniform, non-collimated radiation) and for detecting incident radiation dependent on a wavelength of the radiation (i.e., for determining the surface characteristics of a more narrow band of wavelength). Accordingly, Applicant respectfully traverses the rejection of claims 19, 23 and 24 under Section 103.

New claim 32 has been added and is considered to be in allowable form.


In view of the above amendments, the application is respectfully submitted to be in allowable form, or alternatively, in form for Appeal. Allowance of the rejected claims is respectfully requested. Should the Examiner discover there are remaining issues which may be resolved by a telephone interview, he is

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invited to contact Applicant's undersigned attorney at the telephone number listed below.

Respectfully submitted,

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